

***Myrica gale* - *Spiraea alba* - *Chamaedaphne calyculata* Shrubland**

COMMON NAME	Sweet Gale - White Meadowsweet - Leatherleaf Shrubland
SYNONYM	Sweetgale Mixed Shrub Swamp
PHYSIOGNOMIC CLASS	Shrubland (III)
PHYSIOGNOMIC SUBCLASS	Deciduous shrubland (III.B)
PHYSIOGNOMIC GROUP	Cold-deciduous shrubland (III.B.2)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural (III.B.2.N)
FORMATION	Saturated cold-deciduous shrubland (III.B.2.N.g)
ALLIANCE	MYRICA GALE SATURATED SHRUBLAND ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 2

USFWS WETLAND SYSTEM Terrestrial

RANGE

***Acadia National Park***

This association occurs throughout the Park.

***Globally***

This association occurs in Maine and New Hampshire.

ENVIRONMENTAL DESCRIPTION

***Acadia National Park***

Flat basins at low elevations, often associated with peatland edges or peaty edges of lakeshores. The substrate pH varied widely (three samples), from 4.8 to 6.5. The two samples over 6.0 were in the portion of the Park burned in the 1947 fire while the more acidic sample came from a site outside of the 1947 fire area.

***Globally***

This weakly to moderately minerotrophic mixed shrub swamp of northern New England occurs on stream, lake or pond margins, adjacent to marshes or swamps, or on wet acidic colluvium at the base of slopes. The substrate is well-decomposed peat or muck overlying mineral soils.

MOST ABUNDANT SPECIES

***Acadia National Park***

<u>Stratum</u>	<u>Species</u>
Short Shrub	<i>Myrica gale</i> , <i>Alnus incana</i>
Dwarf Shrub	<i>Myrica gale</i> , <i>Chamaedaphne calyculata</i> , <i>Spiraea tomentosa</i> , <i>Spiraea alba</i> , <i>Rhododendron canadense</i>
Herbaceous	<i>Calamagrostis canadensis</i> , <i>Carex stricta</i> , <i>Triadenum fraseri</i> , <i>Dulichium arundinaceum</i> , <i>Lysimachia terrestris</i> , <i>Carex oligosperma</i>
Non-vascular	<i>Sphagnum magellanicum</i> , <i>Sphagnum palustre</i> , <i>Sphagnum girgensohnii</i>

***Globally***

<u>Stratum</u>	<u>Species</u>
Short Shrub	<i>Myrica gale</i> , <i>Spiraea alba</i> , <i>Spiraea tomentosa</i> , <i>Alnus incana</i>
Dwarf Shrub	<i>Chamaedaphne calyculata</i>
Herbaceous	<i>Calamagrostis canadensis</i> , <i>Carex stricta</i> , <i>Carex utriculata</i> , <i>Carex canescens</i> , <i>Carex oligosperma</i> , <i>Typha latifolia</i> , <i>Triadenum virginicum</i> , <i>Triadenum fraseri</i> , <i>Dulichium arundinaceum</i> , <i>Juncus canadensis</i> , <i>Lysimachia terrestris</i>
Non-vascular	<i>Sphagnum fimbriatum</i> , <i>Sphagnum magellanicum</i>

CHARACTERISTIC SPECIES

***Acadia National Park***

Dominance of *Myrica gale* or, less frequently, *Spiraea* sp.; *Gaylussacia baccata* absent and *Kalmia angustifolia* absent or very minor. *Alnus incana* may be present but is less abundant than *Myrica gale*.

***Globally***

VEGETATION DESCRIPTION

***Acadia National Park***

A shrubby, Sphagnum-based fen with *Myrica gale* strongly dominant in either the >1 m shrub layer or the < 1 m shrub layer. *Alnus incana*, *Spiraea alba*, and *S. tomentosa*, and usually relatively small amounts of *Chamaedaphne calyculata* are frequent associates. *Rhododendron canadense* occasionally contributes a large percentage of the shrub cover. Nutrient-rich areas have taller shrubs; dominants include the above as well as *Nemopanthus mucronata*, *Vaccinium corymbosum*, or *Viburnum nudum* var. *cassinoides*. The herb cover, often more-or-less the inverse of the shrub cover, is dominated by *Calamagrostis canadensis* and/or *Carex stricta*, with occasionally large amounts of *Triadenum fraseri* or, less often, *Oclomena nemoralis* or *Carex oligosperma*.

## USGS-NPS Vegetation Mapping Program

### Acadia National Park

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*Dulichium arundinaceum*, *Juncus canadensis*, and *Lysimachia terrestris* are frequent but less abundant associates. The coverage of the bryoid layer varies, but is always Sphagnum-dominated. Some combination of *S. magellanicum*, *S. fimbriatum*, and *S. palustre* is usually dominant. At some sites, *S. girgensohnii* or *S. squarrosum* may be well represented.

#### **Globally**

The shrub stratum is characterized by *Myrica gale*, *Spiraea alba*, *Spiraea tomentosa*, *Alnus incana*, *Chamaedaphne calyculata* in association with others such as *Rhododendron canadense* and saplings of *Acer rubrum*. The herbaceous layer is relatively diverse and variable, and may include *Calamagrostis canadensis*, *Carex stricta*, *Carex utriculata*, *Carex canescens*, *Carex oligosperma*, *Typha latifolia*, *Triadenum virginicum*, *Triadenum fraseri*, *Solidago nemoralis*, *Dulichium arundinaceum*, *Juncus canadensis*, and *Lysimachia terrestris*. The bryophyte layer is characterized by *Sphagnum fimbriatum*, *Sphagnum magellanicum*, and others.

#### OTHER NOTEWORTHY SPECIES

CONSERVATION RANK      G?.

DATABASE CODE          CEGL006512

#### COMMENTS

##### **Acadia National Park**

Sites with a large amount of *Chamaedaphne calyculata* (> 20%) can resemble the Leatherleaf Acidic Fen (*Chamaedaphne calyculata* / *Eriophorum virginicum* / *Sphagnum rubellum* Dwarf-shrubland). Otherwise, the dominance of *Myrica* and *Spiraea* is distinctive.

#### **Globally**

#### **Note:**

This association is found in two different map classes:

- 1) [Sweetgale Mixed Shrub Fen](#)
- 2) [Fen Complex](#)